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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/576,684

Confirmation No.: 4662

First Named Inventor

Thomas GREINER-STOEFFELE

Filed

April 20, 2006

TC/A.U. Examiner Docket No. To Be Assigned
To Be Assigned

Customer No.

: 102520.57766US : 23911

Title

Method From the Selection of Biomolecules From

Biomolecule Variant Libraries

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 AND 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, the attached Form PTO-1449 lists documents which the Examiner may deem relevant to patentability of the claims of the above-identified application.

I. Time Period of Submission

This Information Disclosure Statement is submitted:

1) no later than three months from the application's filing date or 2) before the mailing date of the first Office Action on the merits (whichever is later) or 3) before a first Office Action after the filing of a Request for Continued Examination, and therefore no statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R.§ 1.17(p) is required.
2) after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action, a Notice of Allowance, or an action closing prosecution (Exparte Quayle), (whichever is earlier), and therefore Applicant is filing concurrently herewith:
a Statement under 37 C.F.R. § 1.97(e); or
a fee in the amount of \$180.00 under 37 C.F.R. § 1.17(p).
3) after either a Final Office Action or a Notice of Allowance, bu before payment of the Issue Fee, and therefore Applicant is submitting herewith

a Statement under 37 C.F.R. § 1.97(e); and

a fee in the amount of \$180.00 under 37 C.F.R. § 1.17(p).

II. Statement Under 37 C.F.R. § 1.97(e)
I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
I hereby state that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making a reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement; or
III. Statement under 37 C.F.R. § 1.704(d)
I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement.
IV. Submission of Non-English Language Documents
☐ The following is a concise explanation of relevance of the non-English language documents listed in the attached Form PTO-1449:
\boxtimes The relevance of document(s) $\underline{\mathbf{B1}}$ to the subject matter of the present invention is/are provided in the specification of the above-identified application.
Corresponding foreign or international report(s) citing document(s), together with an English-language version(s) (if not already in English) of that portion of the report(s) indicating the degree of relevance found by the foreign office(s) is/are submitted.
English language family member publication(s) of document(s) is/are noted on Form PTO-1449.

<u>B1</u> .	\boxtimes	English lang	guage abstrac	ct(s) is/a	are submitted	l for document(s)
;	☐ is/are su	English tra bmitted herew		f the fo	oreign langu	age document(s)
		Applicant	submits	the	following	explanations:
V. <u>Co</u>	ntinuatio	ons/Divisional	<u>s</u>			
since they	, filed in 37 C. y were p	d .F.R. §1.98(d),	, from which copies of the nitted to or c	ch this a e docum ited by	application cl nents are no the United S	cation Serial No. aims benefit. As t being provided tates Patent and
that any application appropria	such doo on. Appl ate to an	cument consti icant does not	tutes prior a waive any r rwise remove	ort againg ight to the any lis	nst the claim take any acti sted documen	as an admission as of the present on that would be at as a competent
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Septembe	er 12, 20	07	J, D.	Evans	submitted,	
Intellectu P.O. Box Washingt Telephon	nal Prope 14300 ton, DC 2 e No.: (2	ORING LLP erty Group 20044-4300 202) 624-2500 02) 628-8844	Regis	stration	No. 26,269	

PTO/SB/08a (09-06)

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Complete if Known Substitute for form 1449A/PTO Application Number 10/576,684 INFORMATION DISCLOSURE Filing Date April 20, 2006 Thomas GREINER-STOEFFELE STATEMENT BY APPLICANT First Named Inventor Art Unit To Be Assigned Examiner Name To Be Assigned (Use as many sheets as necessary) 2 Attorney Docket Number 102520.57766US of Sheet 1

		<u> </u>	U.S. PATENT I	DOCUMENTS	
Examiner Initials'	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
		Number-Kind Code ² (if known)		_	Figures Appear
		US-			
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FOREIGN PATENT DOCUMENTS								
Examiner Initials'	Cite No.1	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶		
	B1	DE 196 46 372 C1	06-19-1997	EVOTEC BioSystems GmbH		AB		
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1	Examiner	Date	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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			•	Complete if Known			
Substitute	e for form 1449B/P	го			Application Number 10/576,684		
INFORMATION DISCLOSURE			SURF	Filing Date	April 20, 2006		
				First Named Inventor	Thomas GREINER-STOEFFELE		
STATEMENT BY APPLICANT (Use as many sheets as necessary)		Art Unit	To Be Assigned				
		Examiner Name	To Be Assigned				
Sheet	2		of	2	Attorney Docket Number	102520.57766US	

***		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	C1	Zaccolo, M and Gherardi, E., "The Effect of High-Frequency Random Mutagenesis on in Vitro Protein Evolution: a Study on TEM-1 beta-Lactamase", J. Mol. Biol., 1999, Academic Press, pp. 775-783, Vol. 285. (Article No. jmbi.1998.2262 available online at http://www.idealibrary.com)	
	C2	Cadwell, R.C. and Joyce, G.F., "Randomization of Genes by PCR Mutagenesis", PCR Methods and Applications, Vol. 2, pp. 28-33, 1992, by Cold Spring Harbor Laboratory ISSN 1054-9803/92.	
	C3	Eigen, M., McCaskill, J., and Schuster, P., "The Molecular Quasi-Species", Advance In Chemical Physics, 1989, John Wiley & Sons, Inc., pp. 149-263, Vol. LXXV.	
	C4	Joo, H., Lin, Z. and Arnold, F.H., "Laboratory Evolution of Peroxide-Mediated Cytochrome P450 Hydroxylation", Nature, 17 June 1999, Macmillan Magazines Ltd., pp. 670-673, Vol. 399. (<u>www.nature.com</u> – letters to nature).	
	C5	Korbel, G.A., Lalic, G., and Shair, M.D., "Reaction Microarrays: A Method for Rapidly Determining the Enantiomeric Excess of Thousands of Samples", J. Am. Chem. Soc., 2001, pp. 361-362, Vol. 123.	
	C6	Samuelson, J.C. and Xu, S.Y., "Directed Evolution of Restriction Endonuclease BstYl to Achieve Increased Substrate Specificity", J. Mol. Biol., 2002, Elsevier Science Ltd., pp. 673-683, Vol. 319.	
	C7	Xia, G., Chen, L., Sera, T., Fa, M., Schultz, P.G., and Romesberg, F.E., "Directed Evolution of Novel Polymerase Activities: Mutation of a DNA Polymerase into an Efficient RNA Polymerase", Proc. Natl. Acad. Sci., 2002, pp. 6597-6602, Vol. 99, No. 10, USA.	
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Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent